

ABSTRACT OF THE INVENTION

The invention provides a range finder capable of carrying out three-dimensional measurement stably for a long period of time. A light pattern is projected on a subject by
5 using a light source array unit in which a plurality of light sources, such as LEDs, are arranged. Even when each LED has a small light quantity, a sufficiently large quantity of light can be projected on the subject by the entire light source array unit, and hence, the three-dimensional
10 measurement can be stably carried out. Also, a plurality of light patterns can be generated by electrically controlling a light emitting state of each LED of the light source array unit.